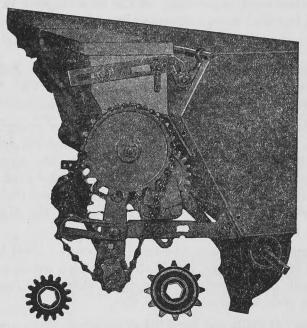
PRESERVE THIS BOOKLET

THE NEW UNIVERSAL FERTILIZER ATTACHMENT

Instructions for Setting Up and Operating with List and Illustrations of Duplicate Parts



Picture showing the position of the Attachment in telation to the grainbox of the drill. The top hooks which hold the Attachment to the top edge of the grainbox and the bottom pads which rest against the bottom edge of the grainbox.

MANUFACTURED BY

The Consolidated Smelter Products Ltd.

Calgary, Alberta

Branches:

EDMONTON

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General Erection Instructions

• • •

On all high wheel of 14 runs and over, and press drills, where the grain delivery at the grain box feeds to the rear, the attachment is mounted at the back of the grain box.

On high wheel and press drills, where the grain delivery at the grain box is towards the front, the attachment is mounted forward of the grain box.

These two types comprise by far the majority of all drills, and in both cases the Standard drive is used.

On some high wheel drills under 14 runs and on some disc seeders and plow seeders, the attachment cannot be mounted on the same side of the grain box as the grain delivery. On these drills (listed later) the attachment is mounted on the opposite side to the grain delivery and in which case, a reverse drive is used.

ATTACHMENT UNITS.

Attachments are made up of two or more units coupled together to give the requisite number of runs to suit the drill. The attachment is driven from one end only, on drills up to and including 16 runs.

On drills of 18 runs and over, but for a few exceptions mentioned later, it is driven from both ends. For hand lift drills, where the hand lift levers are behind the grain box, the length of the various units are so arranged that the couplings between the units are in line with the hand lift levers, in order that these may pass into the space between the boxes so that as much of the disc pressure quadrant as possible is utilized.

In the majority of cases, the hand lift levers cannot be set into the last one or two notches, and if the last notch available does not give sufficient disc pressure, the springs should be reset on the disc pressure rods to compensate for this.

On power lift drills and hand lift drills where there are no levers behind the grain box, the attachment is supplied made up of units best adapted for the drill, irrespective of where the couplings occur.

MOUNTING THE ATTACHMENT.

The attachment units when taken from the crates, have everything mounted thereon, except the drive from the drill. These drive parts together with the spare sprockets and gears, are shipped in a small sack with each drive box.

A few makes of drills require parts in addition to the standard shipment. These parts are generally sacked separately and wired to the crates.

The drills requiring these extra parts or special instructions are listed below.

At the top ends of each unit box will be seen slotted bars, to the bent ends of which are attached a round and a square ended hook. These are the hooks which hold the attachment to the top edge of the grain box. The round ended one is for steel box drills and the square ended one for wooden box drills.

Select the hooks required for your drill and mount these on the insides of the slotted bars. The hooks not required, may be left off, or mounted to the outsides of the slotted bars and turned away from the grain box where they will not interfere.

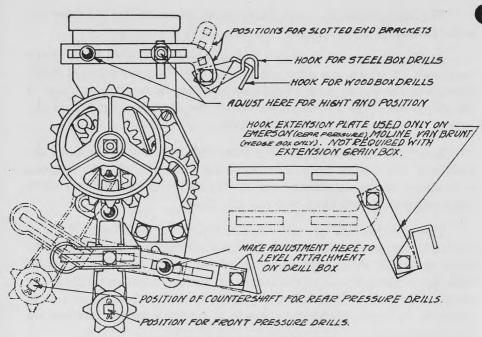
The attachments are all shipped with the bent ends of these slotted bars turned downwards. In this position, they are suitable for most makes of drills. On some makes of drills, particularly those with large grain boxes, the slotted bars must be removed from the ends of the boxes, and bolted on again with the bent ends turned upwards, in which position, they will allow for a better location for the attachment.

Where the attachment is mounted on the drill box on the same side as the hinges, it is sometimes difficult to install all the hooks. This applies chiefly to one way disc seeders. For these cases, a long 3/8" bolt and a pipe filler are supplied. These can be used between a pair of boxes at the upper rear hole where the slotted bars are attached to the box. In this way the units of the attachment are anchored together and at this junction a box hook need be used on the end of one slotted bar only, whichever is the easier to install. On some drills, it is better to open the clips somewhat for installation after which they can be again closed by a hammer, to give a good grip.

Make the first trial of the attachment on the drill with the slotted bars in the position as received, and if the correct adjustment cannot be made, they can be removed and turned so that the bent ends turn upwards.

The two positions for these slotted bars are shown in the diagram at the top of the next page.

These are a few rear pressure drills on which the attachment cannot be set high enough to clear the rear pressure fingers using the standard end brackets. In these cases, hook extension plates are supplied which are bolted to the box hooks and the ends of the slotted levers as shown in the diagram. The extensions are only necessary on these drills where the standard grain box is used. Where an extension box is used on the grain box, the standard box hooks can be used on the top edge of the extension box and the extension plates discarded.



END VIEW OF ATTACHMENT.

COUNTERSHAFT BRACKETS.

The diagram shows two positions for the arms which hold the countershaft bearings. Any intermediate position between these two extremes can be obtained by slacking the bolts which hold the arms to the main casting and resetting to the position desired. In general for front pressure drills these arms are correct in the position as shipped, but for rear pressure drills, they should be moved to their extreme rear position before mounting the attachment.

MOUNTING THE ATTACHMENT.

Having made the preliminary adjustments we are now ready to mount the attachment on the drill.

For a two unit attachment, select one unit.

For a three unit attachment, select the middle unit.

For a four unit attachment, select the two middle units.

If your drills is one of the following makes, there are some special instructions for mounting the attachment. Look this up under the drill heading.

All Cockshutt drills.

Superior type No. 24 drills.

Moline one-way disc seeders.

Kirchner seeder plows.

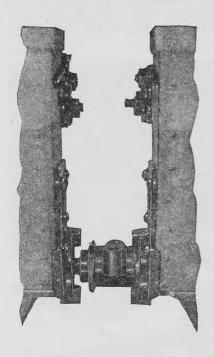
Deering drills.

Van Brunt press drills.

High wheel drills 16 and 14 runs.

High wheel drills under 14 runs.

Lift up the lid of the grainbox and hook the selected unit by its top box hooks at its correct position on the grainbox. Adjust the lower pad to rest against the bottom edge of the grainbox and set this so that the attachment is level on top. Note now, how this first section sets in regard to the drill, whether it must be raised to clear any parts of the drill, or can be lowered. In which case, make the necessary adjustments always keeping the attachment box level.



This cut shows the quick-acting gunlock by which two or more sections of the New Universal Attachment are locked together to form one long unit to suit the drill. The two sections are locked together by turning the centre portion one-quarter turn.

The centre portion carries either the long coupling bearing, which joins the adjacent feed shafts together, or the two short separate bearings to be used where the feed shafts are not to be coupled together. These two separate bearings are always shipped at the end of the righthand box unit away from the drive.

At this position they are correct for the following attachments:

One-unit single drive attachments.

Two-unit double drive attachments.

Three-unit double drive attachments.

The two short bearings are not in their correct place for the following attachments.

Two-unit single drive attachments. Three-unit single drive attachments.

On these attachments they must be installed at the extreme end of the last box away from the drive and a long coupling bearing used at the place from which they were taken.

For four-unit double drive attachments instal the two short

bearings at the middle gunlock between the two centre units.

On single drive attachments where the two short bearings are at the extreme end of the last box from the drive, these are held in position by the clip SFB-60 by entering this over the outer end of the gunlock and turning to lock.

Having set the first unit, make adjustments to the holding brackets of the remaining units, so that when these are hooked on, they will assume the same positions as the initial unit. When all units are installed, couple these together by means of the gunlock, by entering the various shaft ends within the square hole journals, and turning the gunlock one quarter turn by means of a bolt or drift pin.

Be sure that the leather seal washers are in their correct position, that is, within the recess in the end castings, before coupling up the gunlock. With the various units of the attachment mounted on the grainbox and coupled together, go again over the top hooks

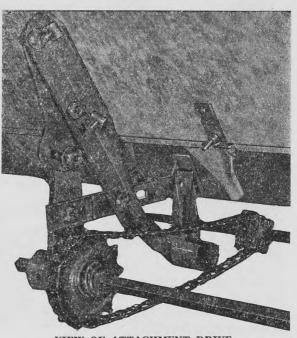
and lower pads and see that these are all bearing correctly to the box. If not, make the necessary adjustments.

The attachment when correctly set, should be as close to the grainbox as possible, without interfering with the grain setting quadrants or any other part of the drill. It should not be higher than necessary, yet on rear pressure drills, it must be sufficiently high to clear the pressure fingers when the pressure shaft is moved.

See that there is an equal distance between the ends of the attachment and the ends of the grainbox at both ends and that the attachment top is level for and aft when the drill is hitched up for seeding.

FERTILIZER TUBES.

Put the fertilizer tubes into the top of the ribbon conductor cups, and note if they are too long. If so, cut a little off the end. Do not cut these until you feel sure that the attachment is correctly set and then allow these tubes to go as far into the cups as possible, without interfering with passage of the grain. This is quite a long way on the majority of drills if the front edge of the tube is cut off on a slant.



VIEW OF ATTACHMENT DRIVE.

LOCATION OF COUNTERSHAFT DRIVE.

Look along the grainshaft of the drill and note the position of the first clear space thereon between two runs from each end. This may be between the 1st and 2nd, 2nd and 3rd, 3rd and 4th, or 4th and 5th, and this will determine the position for the attachment drive, this will also determine the location on the attachment where the angle bracket carrying the inner countershaft must be mounted. Look at the picture of the drive and it will be seen that this whole angle bracket assembly can be removed from the box by taking out two bolts. There are a series of holes, similar to those exposed when this assemble is removed, at various places along the back plate of the attachment. These holes are all covered by cover strips so that the desired pair can be opened by removing the cover strip and using this to cover the holes from which the angle iron and assembly was removed.

Install the sprockets on the grainshaft, line up the countershafts and put on the chains. Adjust the chain stripper to the slack side of the chain, and make sure that all the bolts which hold the countershaft arms and the adjusting pads with their links are tight before applying the power.

SPECIAL DRILLS.

Cockshutt No. 8 Drills—The acreage recorder must be packed out, away from the grainbox to allow the fertilizer tube to go behind.

Remove the upper bolt and the left hand bolt which hold the acreage recorder to the grainbox. Slack the right hand bolt until the pieces of pipe can be placed between the feet of the acreage recorder and the grainbox. The long pipe at the left hand bolt and the short pipe at the top bolt. Put in the longer bolts and tighten up. See that the wheel on the end of the recorder shaft meshes with the worm on the grainshaft. This can be adjusted for mesh by revolving the pieces of pipe.

Cockshutt Wood Box Drills—On the left side of these drills, the acreage indicator must be moved from its position to one further along the grainbox, to permit the drive being installed between the 2nd and 3rd runs. Mark the position that the lever assumes on the quadrant before removing it. Take out the screws that hold this to the grainbox and move the indicator to the nearest open space along the box. Set this correctly with the heel of the pointer resting against the grain run as before, and fasten this at its new position.

Superior Type 24 Drills—The upper grain cups which attach to the grainfeeds must be changed for the new ones sent in order to give room for the fertilizer tubes to be entered. If the ribbon conductor tops are made up of the parts E-610 and E-611, these can then be clipped onto the new upper cups.

If the ribbon conductor tops are made up of the parts B-1718 and B-1719 it will be necessary to cut the rivets which hold these two parts together to free the ribbon conductor tube which must then be installed in the new lower cups supplied, so that these can be attached to the new upper cups. Owing to the slow speed of the grainshaft on these drills, it is not possible to drive the attachment from this. The drive is taken from the main axle, by mounting thereon the parts supplied by the makers, to drive the grass seed attachment.

If these parts are already on the axle, they can be utilized, but if not, the parts supplied must be mounted.

Jack up the left hand side of the drill until the main wheel is just clear of the ground. Remove the inner axle bearing and collar. It may be necessary to slack the bolts in the outer axle bearing to drop the shaft sufficiently to remove the inner bearing.

Put the parts supplied over the end of the axle in the following order: Collar B-1982, Spring, Sprocket B-733, throw-out Yoke, Clutch plate B-737 and finally, B-1381. Replace the axle bearing and set the parts on the axle in their correct relation with the centre line of the sprocket midway between 3rd and 4th grain runs. Attach the throw-out lever B-289 to the pressure shaft and connect to the throwout yoke.

The grain feed setting quadrants at their present position on the grainbox interfere with the location of the attachment. Two steel brackets are supplied to change the position of the quadrants.

Slack the two set-screws which hold the grain setting levers to the round control shaft. Remove the grain quadrants from the grainbox. Bolt the brackets to the grainbox and the quadrants again to the brackets. Set the grain fingers to the zero quantity, that is, down as far in the feed cups as they will go by turning the control shaft, and at this position, tighten the set-screws in the grain setting levers whilst on the zero mark of the quadrants.

As the attachments on Superior type 24 drills are axle driven and this drive can be placed on one axle only, these are made driven from one end, in which case, two extra sprockets and two extra gears are supplied for fertilizer quantity regulation.

Moline One-way Disc Seeders—On these drills it is not possible to place the attachment on the same side of the drill box as the grain feed, so the attachment is mounted behind the grainbox, and supplied with a reverse drive. The standard box hooks can be used over the back edge of the grainbox. The grainbox lid must be set so that the box is filled from behind, if this is not already done. On Moline 10'0" machines, three boxes are supplied, the small box to be used in the middle. On all Moline One-way Seeders, the blanks closing the grass seeder tubes on the ribbon conductor tops must be removed.

Kirchner Seeder Plows—On these seeders it is not possible to mount the attachment on the same side of the grainbox as the grain delivery, so the attachment is mounted behind the grainbox and a reverse drive is used. The standard box hooks can be used by prying up the box lid at the hinge.

The grainshaft sprockets are made to fit the round grainshaft, and are anchored by a set screw. It is advisable when the correct location for this sprocket has been determined, to file a flat on the grainshaft beneath the set-screw.

Deering Drills—On these drills the attachment has to be mounted quite high and sufficiently far to the rear, so that the countershaft will clear behind the pressure bar. It should be noted that all the pressure fingers have been mounted on the pressure shaft the correct way, that is, to the underside of the pressure bar, as it is quite frequent to find these mounted on the top of the pressure bar, in which position they will interfere with the countershaft. It is also necessary to move some of the pressure fingers along the pressure shaft so these clear the fertilizer feed spouts. This can be seen when the attachment is mounted and the pressure shaft moved.

Van Brunt Press Drills—On these drills, the attachment can be mounted either in front of the grainbox or to the rear.

The front mounting is the simpler, and for this reason, the reverse drive parts are included for these drills. If these parts are not installed, mount them as per the instructions therefor, and follow the general instructions for setting up the attachment.

With the forward mounting the fertilizer tubes are entered into the grass seed aperture in the ribbon conductor tops.

For a rear mounting do not use the reverse drive parts, but set up the drive for the standard as shown in the diagram.

Note if the pressure rods have all been installed the correct way, that is curving away from the grainbox. It is often found that these are installed curving towards the grainbox, in which case they will interfere with the fertilizer tubes. Correct any that are not mounted right before putting on the attachment. On Press Drills which have a brace from the seat bar to a hole near the top of the grainbox, this brace must be moved to a hole lower down on the grainbox to give room for the attachment.

High Wheel Drills 16 runs and 14 runs—On some disc seeders and seeder plows, also on all high wheel drills of 16 runs and 14 runs a single drive is used and the feed shafts coupled together as one shaft.

High Wheel Drills under 14 runs—The attachment on these drills is mounted behind the grainbox when only one handlift lever is used, but where two are used it is mounted on the front of the grainbox and a reverse drive is supplied, with attachments for these drills new ribbon conductors and tops are included, which replace those on the drill. These provide an entrance for the fertilizer at the forward side of the feed cups. These small attachments are driven from one end only, but are mounted on the drill similarly to the larger attachments.

When the attachment is mounted on the same side of the drill grainbox as the lid is hinged, it is sometimes preferable to remove the lid until the attachment has been mounted. The top edge of the grainbox can then be notched for the upper hooks if these interfere when the lid is replaced.

OPERATION OF THE ATTACHMENT.

When the attachment has been correctly set on the drill, make sure that everything is free to run and that ALL BOLTS are thoroughly tightened up before applying the power. It is good practice to try the attachment by hand for easy turning before putting on the chains from the drill. This can easily be accomplished on a correctly mounted attachment, by gripping the countershaft sprocket, as the attachment is very easy to turn. Grease all bearings before starting and again at intervals not less than twice each day the machine is run.

To clean out the attachment at the end of the season, or when it will not be required again for a period, run the machine until the hoppers are as empty as possible, that is, when the feedshaft is exposed. Slacken the thumb nuts on the bolts at the bottom of the hoppers and pry down the bottom strip to expose the clean out holes. Then with a brush or piece of rag, the last remaining fertilizer can be swept out and the machine put away until again required.

CARE OF ATTACHMENT AND FERTILIZER DURING WET WEATHER.

Fertilizers must always be kept dry. Wet fertilizer will cake up and in this condition, it is not possible to feed it accurately through any feeding machine. The attachment has been made as rain proof as it is possible to do so, but it is only reasonable to expect that it will sometimes be unavoidably exposed to the elements.

When seeding has to be stopped because of rain or damp weather, if the attachment is nearly empty, and it is possible to do so, we suggest dropping the bottoms and cleaning out the hoppers. This fertilizer need not be wasted, as it can be collected on sacks placed beneath the attachment and later returned to the general supply.

Realizing, however, that the above method is not often practicable, the next best procedure is to fill the hoppers up full of fertilizer, close the lids and put some heavy article thereon to be sure they do not blow open.

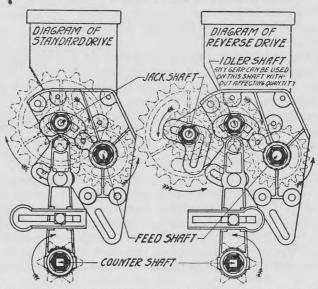
When it is again possible to seed, it may be found that there in thin crust of fertilizer on top only, and this can be broken up by hand before starting up. The balance of the fertilizer within the boxes will be in good condition for seeding.

MOUNTING REVERSE DRIVES.

The brackets for the reverse drives are often shipped separately from the end brackets, but the diagram below shows clearly where these are attached.

To install them, remove the jackshaft assembly complete, remove the nut from the bolt which hold the upper end of the countershaft arm to the drive bracket, and bolt the reverse drive bracket at this place and the upper hole of the drive bracket.

Mount the jackshaft assembly to the reverse drive bracket, using the upper slot and install the idler gear stud and bushing at the slot from which the jackshaft assembly was removed. Use the spare gear on the idler shaft and set all gears into correct mesh.



SETTING THE QUANTITY OF FERTILIZER IT IS DESIRED TO FEED.

The quantities of fertilizer which the attachment will feed as shown on the chart printed below and also reprinted and placed within the box lid, are the nearest guide that it is possible to give for an attachment designed to fit a variety of different drills.

The attachment is sent out with the sprockets and gears mounted for about 35 lbs. per acre Am. Phos. On few drills will this exact quantity be seeded. On some it will be too high, and on some too low, so it is left to the user to check this for his particular drill.

This can best be accomplished by filling the boxes to a certain marked height. Strike off this level, and then start drilling a definite number of acres. Weigh out the quantity of fertilizer required to bring the level back again to the original position, and this amount of fertilizer, divided by the number of acres seeded, will be the pounds per acre of fertilizer which this combination of gears and sprockets will feed. Mark this on the chart in the blank space opposite the line showing the sprockets and gears. Having once obtained

check on one quantity, the procedure need not be repeated for the other quantities shown on the chart, as they will bear a direct proportion to the one already found.

For instance, if with gears and sprockets set for 35 lbs. per acre, by test it was found that only 30 lbs. was fed, that is one-seventh lower than shown, the sprockets and gears shown for, say, 70 lbs. would feed also one-seventh lower or 60 lbs., and others proportionately.

Another method which gives the same result, is to multiply all the quantities shown on the chart by the quantity you actually checked as fed by a certain setting of gears and sprockets, and divide by the quantity as shown on the chart for these SAME sprockets and gears.

Thus, presuming, as before, that with the sprockets and gears set for 35 lbs. according to the chart, the quantity actually fed was 30 lbs. per acre, any other quantity on the chart multiplied by 30 and divided by 35 will give the actual quantity which will be fed, thus 70 lbs. x 30 lbs. =60 lbs. the quantity which the gears shown for 70

lbs. will feed on the drill. So that when one setting has been checked, all the other quantities on the chart can be calculated and marked in the blank spaces provided.

STARTING FERTILIZER FEED.

When the fertilizer boxes are filled for the first time, there will be no fertilizer in the space behind the baffle to pass through the outlet holes. It will take a number of revolutions of the feed shaft to fill this space, and cause fertilizer to run.

When feeding small quantities, this would be a long strip on the field before the fertilizer started to feed. To overcome this, we suggest that after the box has been filled for the first time, a wrench be used to turn the countershaft, in the same direction it will turn, until sufficient turns of the feed shaft have been made to start fertilizer running at each outlet.

The countershaft will naturally be somewhat hard to turn because it will be necessary to overcome the friction clutch on the drive sprocket, but no harm can be done if the wrench is used near to the clutch sprocket.

LEAVE CHECK STRIPS IN YOUR FERTILIZER FIELDS.

The only true method by which the advantages of fertilizer can be demonstrated is by leaving one drill width, without fertilizer through a fertilizer field.

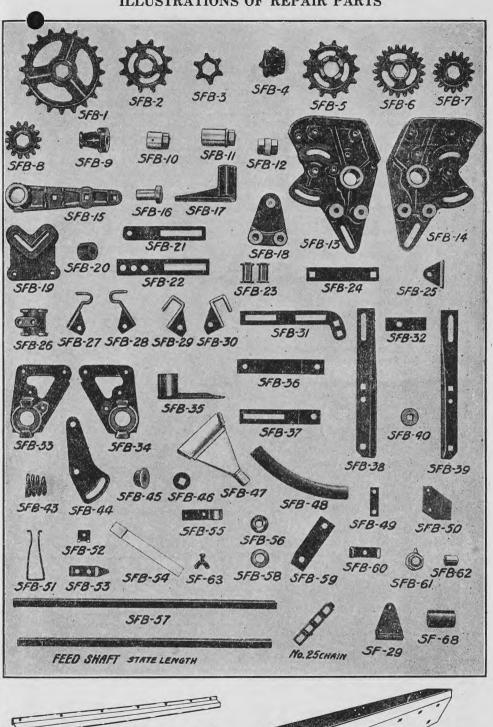
To compare a field which has been fertilized with an adjacent field which has received no fertilizer, does not always give a true comparison, but the unfertilized strip running through a fertilized field can not be questioned.

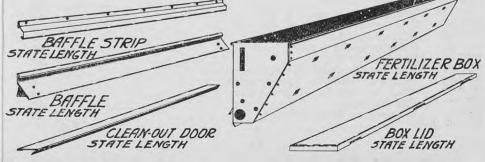
To cut off the fertilizer feed whilst the grain is still left feeding, is a simple matter on this attachment and does not require that any chains be removed. Simply slack the nuts which hold the jackshafts in place on the end castings, slide these along their slots so that the gears on the jackshaft are out of mesh with the adjacent gears. To start feeding fertilizer again, move these back to their original positions.

QUANTITY CHART FOR ELEPHANT BRAND FERTILIZERS on DRILL 6" SPACING

	R ACRE	SPROCKETS			ARS	
mm.	T. S. Phos.	Counter Shaft	Jack Shaft	Jack Shaft	Feed Shaft	
12	P. Dies	6	20	14	21	
	20	6	20	16	21	
15		6	20	14	16	
	25	6	20	EV	EN	
	i i	6	12	14	21	
20	30	6	20	16	14	
		6	12	16	21	
	İ	6	20	21	16	
	35	12	20	14	21	
25	1771-7	6	12	14	16	
	40	6	20	21	14	
	,	12	20	16	21	
30	45	6	12	EV	EN	
		12	20	14	16	
35	50	6	12	16	14	
		12	20	EV	EN	4
		6	12	21	16	-
1000	1	EV	EN	14	21	
40	60	12	20	16	14	
		6	12	21	14	
45	1 4	EV	EN	16	21	
	70	12	20	21	16	
50	1		EN	14	16	
	80	12	20	21	14	
60			EN		EN	-
	95	20	12	14	21	
70			EN	16	14	
• 0	110	20	12	16	21	
80	110	EV	EN	21	16	
- 00	125	20	12	14	16	
90	120	EV	EN	21	14	
- 00	160	20	12		EN	
100	100	20	12	16	14	
100		$\frac{20}{20}$	12	21	16	
120	190	20				
120	190	20	12	21	14	

ILLUSTRATIONS OF REPAIR PARTS





PRICE OF REPAIR PARTS

PART NO.	. DESCRIPTION	PRIC
SFB-1	20 tooth change sprocket	
SFB-2	12 tooth change sprocket	
SFB-3	6 tooth change sprocket	
SFB-4	6 tooth grain shaft sprocket	2
SFB-5	13 tooth countershaft sprocket	
SFB-6	21 tooth chain gear	
SFB-7	16 tooth chain gear	
SFB-8	14 tooth chain gear	.1
SFB-9	Countershaft sprocket bushing	
SFB-10	Feed shaft bushing	
SFB-11	Countershaft bushing	
SFB-12	Jackshaft bushing	1
SFB-13	Right hand drive casting	1.5
SFB-14	Left hand drive casting	1.5
SFB-15	Countershaft arm	
SFB-16	Jackshaft stud	.1
SFB-17	Chaintightener on countershaft arm	.1
SFB-18	Drive cover plate	
SFB-19	Reverse drive bracket	9
SFB-20	Centre feedshaft journal (short)	.1
SFB-21	Lower adjusting strut	1
SFB-22	Lower adjusting strut extension	
SFB-23	Grainshaft sprocket husbing n	er nair 1
SFB-24	Centre brace reinforcing strap	.1
SFB-25	Lower thrust pad	
SFB-26	Lower thrust pad	
SFB-27	mook for steel box left	
SFB-28	Hook for steel box right	.1
SFB-29	Hook for wood hox left.	1
SFB-30	Hook for wood box right	.1
SFB-31	Slotted end bracket	
SFB-32	End bracket reinforcing plate	
SFB-33 SFB-34	Intermediate bearing left	
SFB-35	Intermediate bearing right	2
SFB-36	Chain stripper	
SFB-37	Adjusting strut tie bar Chain stripper strut	
SFB-38	Centre brace (right hand)	
SFB-39	Centre brace (left hand)	
SFB-40	Feed shaft packing (leather)	
SFB-43	Countershaft sprocket spring	
SFB-44	Centre brace bracket	1
SFB-45	Countershaft set collar	7
SFB-46	Countersnait washer	.0
SFB-47	Fertilizer feed cup	.1
SFB-48	rerunzer tube (rubber)	
SFB-49	Battle seal plate	.0
SFB-50	Baille seal (rubber)	.0
SFB-51	Baille spring	
SFB-52	Daille spring clip	
SFB-53 SFB-54	Baffle pad	
SFB-55	Hole cover for back plate	0
SFB-56	Clamp for clean out noor	
SFB-57S	Jackshaft washer	
SFB-57L	Countershaft ½ sq. x 2' 5¼ Countershaft ½ sq. x 3' 4%	
SFB-58	Intermediate bearing washer	
SFB-59	Hook extension plate	
SFB-60	Hook extension plate End bearing stop	1
SFB-61	Idler gear bushing (for reverse drive)	
SFB-62	Idler gear stud (for reverse drive)	
SFB-63	Wing nut bolt for clean out door	
SF-29	Box lid hinge	1
SF-68	Intermediate journal (long)	
No. 25 cha	in	or link

Food Chaft.	
Feed Shaft: 1 ft.—115%" long	35
2 ft.—15%" long	40
2 ft.—11%" long	45
3 It.— 5%" long	.50
3 ft.—115%" long	-55
4 It.—5%" long	.60
4 It.— 8%" long"	.65
4 It.—11% long	.70
5 It.— 2 % 10ng	75
5 ft.— 2%" long	80
Fertilizer box complete with ends, lid and baffles:	
1 ft.— 9½" long	4.70
2 ft.— 3½" long	5.00
2 ft.— 9½" long	5.50
3 ft.— 3½" long 3 ft.— 9½" long	6 20
4 ft.— 3½" long.	6.70
4 ft.— 6" long	6.85
4 ft.— 9½" long	7.00
5 ft.— 0¾" long	7.10
5 ft.— 3½" long	7.20
State number of outlets in box when ordering.	
Box Lid:	
1 ft.— 9¾"	
2 ft.— 3¾"	
2 ft.— 9¾"	
3 ft.— 9%" 4 ft.— 3%"	
4 ft.— 6 ¹ / ₄ "	
4 ft.— 9¾"	.65
5 ft.— 1"	
5 ft.— 3¾"	75
Baffle Strip:	
1 ft.— 9%"	10
2 ft.— 3%"	
2 ft.— 9%"	
3 ft.— 3%"	
3 ft.— 9%" 4 ft.— 3%"	
4 ft.— 5%"	
4 ft.— 9%"	
5 ft.— 0%"	
5 ft.— 3%"	
Baffle:	
1 ft.— 9¼"	
2 ft.— 3¼″	
2 ft.— 9¼″	
3 ft.— 3¼″	
3 ft.— 9¼″	30
4 ft.— 3¼″	40
4 ft.— 3¼"	40
4 ft.— 3¼" 4 ft.— 5¾" 4 ft.— 9¼"	
4 ft.— 3¼"	50
4 ft.— 3¼"	50
4 ft.— 3¼" 4 ft.— 5¾" 4 ft.— 9¼" 5 ft.— 0½" 5 ft.— 3¼" Clean out door: 1 ft.— 8"	.50
$4 \text{ ft.} - 3\frac{1}{4}$ " $4 \text{ ft.} - 5\frac{3}{4}$ " $4 \text{ ft.} - 9\frac{1}{4}$ " $5 \text{ ft.} - 0\frac{1}{2}$ " $5 \text{ ft.} - 3\frac{1}{4}$ " Clean out door: $1 \text{ ft.} - 8$ " $2 \text{ ft.} - 2$ "	.50
4 ft.— 3¼" 4 ft.— 5¾" 4 ft.— 9¼" 5 ft.— 0½" 5 ft.— 3¼" Clean out door: 1 ft.— 8" 2 ft.— 2" 2 ft.— 8"	.50 .50
$4 \text{ ft.} - 3\frac{1}{4}$ " $4 \text{ ft.} - 5\frac{3}{4}$ " $4 \text{ ft.} - 9\frac{1}{4}$ " $5 \text{ ft.} - 0\frac{1}{2}$ " $5 \text{ ft.} - 3\frac{1}{4}$ " Clean out door: $1 \text{ ft.} - 8$ " $2 \text{ ft.} - 2$ " $2 \text{ ft.} - 8$ " $3 \text{ ft.} - 2$ "	.50 .50
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$.50 .50 .10 .10 .15 .15 .20
4 ft.— 3¼" 4 ft.— 5¾" 4 ft.— 9¼" 5 ft.— 0½" 5 ft.— 3¼" Clean out door: 1 ft.— 8" 2 ft.— 2" 2 ft.— 8" 3 ft.— 2" 4 ft.— 2" 4 ft.— 5"	.50 .50 .50 .10 .10 .15 .15 .20 .20 .25
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